The Influence of Profitability, Leverage, Firm Size and Capital Intensity Towards Tax Avoidance

Dr. Bambang Setyobudi Irianto¹, Yudha Aryo Sudibyo¹, & Abim Wafirli S.Ak¹

Abstract

This study aims to examine the factors that affect the company’s tax avoidance. There are several factors used include size, leverage, profitability, and capital intensity. The purpose of this study is to determine the influence of firm size, leverage, profitability and capital intensity ratio on tax avoidance in manufacture companies listed on the Indonesian Stock Exchange 2013-2015. Population taken as the object of observation amounted to 156 manufacturing companies listed in Indonesia Stock Exchange in the period 2013-2015. Determination of the sample was made by applying purposive sampling method and obtain a sample of 36 manufacturing companies based on certain criteria. The results showed that the size positive influence on the effective tax rate. While leverage, profitability and capital intensity ratio does not significantly influence the tax avoidance. In this study, there are still many limitations and shortcomings namely the effect of independent variables on the dependent variable. Hence more independent variables are needed.

Keywords: Tax Avoidance, Effective Tax Rate, Companies, Manufacturing.

1. Background

Tax is one of the biggest contribution to a country provided by individuals or companies as taxpayers without getting reciprocal directly; it is forcing and collecting based on law. The government uses tax to develop national structure to achieve general welfare in many sectors (Darmawan and Sukartha, 2014). The tax is also one of the biggest national income source which comes from society. The government can develop programs which can be enjoyed by society through tax payment.

According to Santoso and Ning (2013) in Nurfadilah (2016), most of the companies as taxpayers judge that tax payment is an expense, because tax source is a change from business sector or enterprise to the public sector or government which affects the obedience taxpayer to decrease.

The Directorate General of Taxation has prepared various steps to secure the target of tax revenue. One of them is more intensive in business sector which has a significant contribution to tax revenue. The member of Indonesian Legislative Assembly (DPR) commission, XI Mukhamad Misbakhun, stated that tax revenue per 31 December 2016 reached 1.105 trillion, or 81.54% of target tax revenue in the National Budget (APBN) 2016 of 1.355 trillion. The total income tax grew around 4.13% compared to 2015, but when tax amnesty is excluded from income tax that reaches 993 trillion, the numbers are 73.6% of total income target in tax sector of 1.355 trillion which limits in National Budget (APBN) 2016 (www.liputan6.com). Taxpayers attempt to pay tax as few as possible (Suandi, 2011). Siahaan (2010) in Cahyono et al., (2014) there are three phases or steps which will be conducted by the firm in minimizing tax.

¹ Business and Economic Faculty of Jendral Soedirman University, Indonesia
First, the company is tries evading taxes either legally or illegally. Second, the company tries reducing the expense of tax either legally or illegally. Third, when both of steps cannot be done, taxpayers will pay the tax. It can happen if there are opportunities in the weakness of tax regulations which will lead to tax resistance.

According to Supramono and Theresia (2010:5) in Ngadiman and Puspitasari (2014), tax resistance can be active or passive. Passive resistance is the resistance in the form of obstacles that make it harder to tax holding and having a close relationship with economic structure. Meanwhile, the active resistance is the resistance that can be seen clearly in the form of works directly addressed to the tax forces with the aim to reduce the tax. Active resistance can be done by tax avoidance and tax evasion. Kichler (2007: 45) in Cahyono et al., (2014) distinguished tax avoidance and tax evasion. Tax avoidance is associated with legal acts, with an intention to save taxes, with cleverness, and was considered a good idea and also associated with taxes as costs. Tax evasion, on the other hand, is associated with illegal aspects, fraud, criminal prosecution, risk, tax-audit, punishment, penalty and the risk of getting caught. Also, for rather neutral associations are such as income declaration and tax saving as well as black money produced.

Even there is tax avoidance in Indonesia, The taxpayers still break the tax law or conduct tax evasion. According to Publish What You Pay (PWYP), 24% of 7.834 mining companies in Indonesia did not have Taxpayer Identification Number (NPWP) and 35% of 7.834 mining companies in Indonesia did not report the Tax Return (SPT) in 2013-2014. This is based on data in Directorate General of Taxation and Ministry of ESDM (pwyp-indonesia.org). Based on data of the Directorate General of Taxation in Cahyono et al., (2016), taxation in 2012 was 4.000 foreign companies reported the amount of zero, the companies suffered financial loss for seven years in a period. Mostly, were in the manufacture companies and raw material companies. Dyreng et.al, (2008) in Sudibyo and Jianfu (2016), stated that at least one-fourth of US-listed firms can maintain long-run cash effective tax rates below 20 percent. The average of company paid the tax 30% (Dyreng et al., 2008) in Cahyono et al., (2014).

Tax policy taken by the company has a significant role to the level of tax avoidance such as in determining the financing of the company in the form of debt or leverage. According to Kurniasih and Sari (2013), leverage is adding the amount of debt resulted in the additional cost in the form of interest and reducing tax expense by taxpayers. Other factors that makes company to carryout tax avoidance is firm size and capital intensity, big companies always obtain a great profit, and the great profit will attract government’s attention to apply tax payment for taxpayers (Asfiyati, 2012). As revealed by Rego (2003), that great companies would be more complex on their transactions. It will increase to take gap advantage to perform tax avoidance. Big or small companies can affect profitability because they attain profit, then this also affect corporate assets and corporate debt levels that affect tax payments (Agusti, 2014).

2. Research Model and Hypothesis Development

Agency theory is the theory that explains the relationship between parties which are giving authority (principal) and receiving authority (agent). Luayyi (2010) in Yulfaida and Zhulaikha (2012) stated that agency theory basically discusses a form of agreement between capital holder and managers to manage a company. The managers do not always act by the best wishes of shareholders because the choice is worst or the existence of a moral hazard. Beside that, it also can occur the existence of information asymmetry and earning management.

The existence asymmetry information between managers and shareholders cause a conflict of interest between them (Jensen and Meckling, 1976). Masri and Martani (2012) in Utami (2013) explained the conflict occurs because one party wants to improve compensation received by the managers, while shareholders want to reduce the cost of tax issued by company. The same opinion is also expressed by Alim (2009), that the conflict of interests occurs because the difference in the need to minimize the amount of tax paid or to presents of is high performance financial report for the needs of the shareholders, creditors, and investors.
2.1 Research Model

2.2 Hypothesis Development

2.2.1 The influence of profitability toward tax avoidance

Profitability is an indicator of management performance in managing company’s wealth which is indicated by profit (Dewi, 2016). Nuriningsih (2014) in Agusti (2014) stated that profitability is allocated for shareholders’ welfare in the form of paying dividend and return earning. Utami (2013) explained tax avoidance is a scheme of transactions intended to minimize tax expense by taking advantage of these weaknesses (loophole) terms of taxation in a country so that taxpayers are stated legal because it does not break the rules of taxation.

Based on agency theory that explains relationship between agent and principal who have different interests, wherein profitability as variable independent of tax avoidance. The agent is manager and principal is government. Government as principal is consistent to get more income from tax for the target national income, while manager wants to minimize tax payment to get more company profit. Because of that, the manager conducts tax avoidance to minimize tax payment. But, the increase profit will also increase the company profitability. Profit improvement will result in the amount of higher tax that must be paid, or it can be said that there is a possibility to perform tax avoidance. Siregar and Widyawati (2016) examined profitability as independent variable found having a negative effect on tax avoidance. Based on explanation above, the fisrt hypothesis of this study is :

H1: Profitability has a negative influence towards tax avoidance.

2.2.2 The influence of leverage toward tax avoidance


Based on agency theory that explains the relationship between agent and principal who have different interests, wherein leverage as independent variable of tax avoidance. The agent is manager and principal is government. The government wants to get more income from taxation, but manager wants to minimize tax payment to get more profit that takes advantage from leverage. One way to minimize tax payment is owed because it will raise the interest costs and will reduce company profit, and the ETR will be lower. Richardson and Lanis (2007) also stated that when company more relies on debt financing from financing than equity to operations, company will have a lower effective tax rate. This is because companies which have higher debt level, they will pay higher tax rate. It makes the value of effective tax rate become lower. Richardson and Lanis (2016) examined leverage as dependent variable has a significant influence towards tax avoidance. Dharma and Ardiana (2016) on their research explained that leverage has a positive influence towards tax avoidance. Based on explanation above, the second hypothesis of this study is

H2 : Leverage has a positive influence towards tax avoidance.
2.2.3 The influence of firm size toward tax avoidance
Machfoedz in Suwito and Herawati (2005) stated that firm size is a scale that can classify the company into big companies and small companies, according to various methods such as total asset company, market value, sales average and total sales. Suandy (2011) stated that tax avoidance as tax affairs that remains regarding taxation (lawful).

Based on agency theory which explains the relationship between agent and principal who have different interests, wherein firm size as variable independent of tax avoidance. The agent is manager and principal is government. Basically, big companies always obtain a great profit. Asfiyati (2012) in Dewi and Jati (2014) stated that great profit will attract government's attention to apply tax payment to taxpayers. Great tax rate will be bigger in an amount of tax paid, therefore it will encourage companies to take action on tax avoidance. As revealed by Rego (2003) stated that great companies will be more complex on their transactions, it will increase to take gap advantage to perform tax avoidance. The previous research conducted by Rodriguez and Arias (2013) proved that firm size has a positive influence and significant towards tax avoidance. Based on the explanation above, the third hypothesis of this study is:

H3 : Firms size has a positive influence towards tax avoidance.

2.2.4 The influence of capital intensity toward tax avoidance
Capital intensity ratio is often associated with how big fixed assets and stock owned by company. Tax Avoidance is always interpreted as legal activities (Bambang, 2009) in Rinaldi and Cheisvianny (2015).

Based on agency theory which explains relationship between agent and principal who have different interests, wherein capital intensity as independent variable of tax avoidance. The agent is manager and principal is government. The government wants to get more income from tax but manager want to minimize tax payment from capital intensity. High level of fixed assets will attract government's attention to apply tax payment to taxpayers. Great fixed assets will be bigger in an amount of tax paid, so it will encourage companies to take action on tax avoidance. Rodriguez and Arias (2013) stated that fixed assets of company allow companies to minimize tax as a result of depreciation from fixed assets every year. Cai and Qiao (2007) stated that assets depreciation method is driven by tax law, that depreciation cost can be reduced on earning before tax. More information in research of Sabli and Noor (2012) explained that companies with high fixed assets tend to do tax planning, therefore that the effective tax rate is low. Based on the explanation above, the fourth hypothesis of this study is:

H4 : Capital intensity has a positive influence towards tax avoidance.

3. Research Methodology And Data Analysis Technique
3.1 Research Methodology
3.1.1 Types of Research
The type of this research is quantitative research. According to Sugiyono (2010), quantitative research is research using the data analysis with quantitative/statistics characteristics with the purpose to examine the determined hypotheses.

3.1.2 Object of Research
The object used in this research is manufacture companies listed in Indonesia Stock Exchange (IDX) in 2013-2015. Selected period in 2013-2015 due to examine manufacture companies with latest year. Selected manufacture companies because the manufacture companies has a large scope.

3.1.3 Type and Source of Data
The type of data used in this research is secondary data. The data in this research are all manufacture companies listed on the Indonesia Stock Exchange during the period 2013-2015. Secondary data can be obtained from Annual Report accessing website Indonesia Stock Exchange (www.idx.co.id).

3.1.4 Population and Sample
3.1.4.1 Population
According to Sugiyono (2010) population is a composition of elements which are expressing particular characteristics that can be used to make a conclusion. The population is all manufactures companies listed on the Indonesian Stock Exchange.

3.1.4.2 Sample

Sample is a part of the amount and characteristics owned by the population (Sugiyono, 2010). Samples were selected using purposive sampling technique, the technique of sampling by using certain constraints and considerations so that the selected samples relevant to the purpose of research. Samples were selected by some of the criteria considered for researchers. Researchers determined that the sample selection criteria will be examined as follows:

a. Manufacture companies are continuously listing in Indonesian Stock Exchange since 2013-2015.

b. Profit companies

3.2 Analysis Method

This study used multivariate analysis using multiple regression for hypothesis testing as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4 X_4 + \epsilon \]

Follows are the definition of variable in regression formula above:

<table>
<thead>
<tr>
<th>Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Tax Avoidance</td>
</tr>
<tr>
<td>( \alpha )</td>
<td>Constant</td>
</tr>
<tr>
<td>X1</td>
<td>Profitability</td>
</tr>
<tr>
<td>X2</td>
<td>Leverage</td>
</tr>
<tr>
<td>X3</td>
<td>Firm Size</td>
</tr>
<tr>
<td>X4</td>
<td>Capital Intensity</td>
</tr>
<tr>
<td>( \beta_1 - \beta_4 )</td>
<td>Regression Coefficient</td>
</tr>
<tr>
<td>( \epsilon )</td>
<td>Error Term</td>
</tr>
</tbody>
</table>

Result And Discussion

4.1. Sample Size Determination

Based on the calculation using purposive sampling method, then obtained a sample of 75 companies that can be seen in Table 1 as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Number of Companies</th>
<th>Number of Research Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Manufacturing companies are continuously listing in Indonesian Stock Exchange since 2013-2015</td>
<td>156</td>
<td>468</td>
</tr>
<tr>
<td>2.</td>
<td>Manufacturing companies were experienced financial losses during the year of 2013-2015</td>
<td>(66)</td>
<td>(198)</td>
</tr>
<tr>
<td>3.</td>
<td>Manufacturing companies which don’t publish the complete performance report year of 2013-2015.</td>
<td>(25)</td>
<td>(75)</td>
</tr>
<tr>
<td></td>
<td>Sample Size</td>
<td>65</td>
<td>195</td>
</tr>
</tbody>
</table>
4.2 Outlier Analysis

Outlier is data which different from other observations and appear in the form of extreme values (Ghozali, 2009). Outlier test is performed with the z-score method, how to convert the value data into the score standardized. Hair (1998) stated that for research with samples at over 80 then the standard score is stated outlier if above 3, so the data with standardized scores above 3 or below -3 need to be removed due to outliers. There are 29 company which have outlier data after the test. Therefore sample of this study is 36 company.

4.3 Data Analysis

Analysis Descriptive statistics aims to provide an overview (description) regarding of data to see the value of the average, minimum, maximum, and standard deviation to be easily understood and informative that can be seen Table 2

| Table 2 |
|-------------------------|----------|---------|---------|---------|
| Variable                | N        | Minimum | Maximum | Mean    | Std. Deviation |
| Profitability           | 108      | 0.0138  | 0.2094  | 0.0887  | 0.0479         |
| Leverage                | 108      | 0.0004  | 0.1916  | 0.0674  | 0.0526         |
| Firm Size               | 108      | 25.80   | 33.12   | 28.41   | 1.7434         |
| Capital Intensity       | 108      | 0.0017  | 0.7238  | 0.3549  | 0.1685         |
| Tax Avoidance           | 108      | 0.1255  | 0.3681  | 0.2500  | 0.0464         |
| Valid N (listwise)      | 108      |         |         |         |                |

4.4 Classical Assumption Test Result

Hypothesis testing in this study using multiple regression model. To use multiple regression models must first meet the classical assumption test that can seen in Table 3 as follows:

| Table 3 |
|----------------------|-----------|---------|---------|---------|
| Variable              | Coefficient Regression | Sig. | VIF   | Glesjer |
| Profitability         | -0.223    | 0.020   | 1.237  | 0.698   |
| Leverage              | 0.138     | 0.141   | 1.448  | 0.678   |
| Firm Size             | -0.008    | 0.002   | 1.136  | 0.863   |
| Capital Intensity     | -0.014    | 0.633   | 1.433  | 0.601   |
| Tax Avoidance         |           |         |        |         |
| D-W                   | 1.815     |         |        |         |
| R² (%)                | 20.80%    |         |        |         |
| Adjusted R² (%)       | 17.70%    |         |        |         |
| K-S Test              | 1.250 and 0.088 |     |        |         |

4.4.1 Normality Test Result

From data in Table 3, it known that the asymptotic significant value of 0.088 is greater than 0.05. Therefore, the data of regression model within study is revealed a normal distribution.

4.4.2 Multicollinearity Test Result

According to the Table 3 above, it is obtained that VIF value of profitability, leverage, firm size as well as capital intensity variable each is less than 10. Hence, it can be stated that there is no multicollinearity in regression model.

4.4.3 Heteroscedasticity Test Result

Reffers to the result summary of heteroscedasticity test, it is obtained that significance value of profitability, leverage, firm size as well as capital intensity variable each is less than α (0.05). Hence, it can be stated that there is no heteroscedasticity in multiple regression model.
4.4.4 Autocorrelation Test Result

Based on data in Table 3, it can be seen that value of Durbin-Watson (DW) test result of 1.815. This value is compared with DWtable by using number of data (108) and number of variable (5), so it known that value of dU = 1.774 (Appendix 12) and value of 4 - dU = 2.226. Because DW statistic value is between value of dU and 4 - dU, therefore it can be stated that there is no autocorrelation in multiple regression model within study.

4.5 Hypothesis Result

4.5.1 The influence of profitability toward tax avoidance

Based on the result of multiple regression analysis, it has got the regression coefficient is -0.223 and significance value is 0.020. Thus, profitability have a negative influence toward effective tax rate, it means if the company have more profit then effective tax rate will be lower and lower effective tax rate will be increase tax avoidance. Therefore, H0 is accepted and H1 is rejected, it can be seen that profitability has a positive and significant effect on tax avoidance. Therefore, first hypothesis which states that profitability has a negative influence towards tax avoidance is rejected.

This result is consistent with result of previous study was conducted by Rodriguez and Arias (2013) who found that profitability has a positive influence toward effective tax rate. Noor et al. (2010) stated high profitability of the company will be optimal to do tax planning, therefore tax avoidance will be increase. Watts and Zimmerman (1978) stated that the company have high earnings will be very vulnerable to extracting wealth of deep political transfer's form of laws and regulations and the managers in the companies will have an incentive to use accounting procedures to reduce income for minimize tax payment.

4.5.2 The influence of leverage toward tax avoidance

Refers to the result of multiple regression analysis, it has got the regression coefficient is 0.138 and significance value is 0.141. Thus, leverage have a positive influence toward effective tax rate, it means if the company have more debt or leverage then effective tax rate will be increase and if effective tax rate increase tax avoidance will be decrease. It can be seen leverage have a negative influence toward tax avoidance and no significance because the significance more than a=0.05. Therefore, H0 is accepted and H2 is rejected, it can be seen that leverage has a negative but no significant effect on tax avoidance. Therefore, second hypothesis which states that leverage has a positive influence towards tax avoidance is rejected.

The hypothesis rejected because all companies in Indonesia such as Private Company (PT), General Partnership (Fa), Limited Partnership (CV) who have or have not debt, they are must pay the tax if the company have Taxpayer Identification Number (NPWP). Because tax is obligatory, therefore the company must pay the tax although have debt. The result is difference with previous study was conducted by Dharma and Ardiana (2016) who found that leverage has a positive and significant influence toward tax avoidance. On the other hand, result within study is in line with result of previous study was conducted by Swingly and Sukharta (2015) who conclude that leverage has a negative and no significant influence on tax avoidance. Furthermore, this study result is consistent with previous study by Sabli and Noor (2012) who found that leverage has no significant effect on tax avoidance.

4.5.3 The influence of firm size toward tax avoidance

Following the result of multiple regression analysis above, it has got the regression coefficient is -0.008 and significance value is 0.002. Thus, firm size have a negative influence toward effective tax rate, it means if firm size more large then effective tax rate will be lower and lower effective tax rate will be increase tax avoidance. Therefore, H0 is rejected and H1 is accepted, it can be seen that firm size has a positive and significant influence on tax avoidance. Therefore, third hypothesis which states that firm size has a positive influence towards tax avoidance is accepted.

Result within study is consistent with previous research was conducted by Rodriguez and Arias (2013) who prove that firm size has a positive and significant influence towards tax avoidance. On the other hand, result within study is in line with result of previous study was conducted by Swingly and Sukharta (2015) who found that corporate tax rates has a positive relationship with firm size.
Watts and Zimmerman (1978) stated that the company high earnings will be very vulnerable to extracting wealth of deep political transfer's form of laws and regulations. Managers in the companies will have an incentive to use accounting procedures and reduce income statements. Political cost theory states that the greater political costs facing the company, will lead to a tendency the selection of accounting procedures that may suspend profit reporting from the current period to the next period.

4.5.4 The influence of capital intensity toward tax avoidance

From the result of multiple regression analysis, it has got the regression coefficient is -0.014 and significance value is 0.633. Thus, capital intensity have a negative influence on effective tax rate, it means if capital intensity more big then effective tax rate will be lower and lower effective tax rate will be increase tax avoidance. But, the significance is more than a=0,05. Therefore, the H0 is accepted and H1 is rejected. The fourth hypothesis which states that capital intensity has a positive influence toward tax avoidance is rejected.

Empirically, this study result is inconsistent with previous study was conducted by Dharma and Ardiana (2014) who found that the intensity of fixed assets has a positive influence on effective tax rates (ETR). On the other hand, result within study is in line with result of previous study was conducted by Liu and Cao (2007) who prove that capital intensity of the listed companies seem to have no significant effects on tax avoidance. The results of this study indicate the extent of ownership of fixed assets does not give a big enough effect in terms of reducing tax payments by the company. High capital intensity carried out by a company is not solely to avoid taxes but rather is done by the company for the purpose of running the company's operations (Dharma and Ardiana).

5. Conclusion

1. Profitability has a positive influence toward tax avoidance of manufacturing companies listed on Indonesia Stock Exchange.
2. Leverage has a negative and no significant influence toward tax avoidance of manufacturing companies listed on Indonesia Stock Exchange.
3. Firm size has a positive influence toward tax avoidance of manufacturing companies listed on Indonesia Stock Exchange.
4. Capital intensity has a positive and no significant influence toward tax avoidance of manufacturing companies listed on Indonesia Stock Exchange.

Reference


